

REMARKS

Claims 28-47 are pending. Favorable reconsideration is respectfully requested.

Applicants would like to thank Examiner Collins for the helpful and courteous discussion held with their representative on January 16, 2004. During that discussion, the Examiner suggested that adding a step of selecting plants for the desired property, e.g., improved drought resistance or high resistance to high salt concentrations, to the claims would be favorably considered (see the Examiner's Interview Summary). In submitting the amendments above, Applicants have adopted the Examiner's suggestion.

Thus, the present invention relates a method of increasing the drought resistance of plants, comprising

introducing a polynucleotide encoding a protein having raffinose synthase activity into plants and

selecting plants which have higher drought resistance compared to the plants prior to introducing the polynucleotide. See Claim 28.

The present invention also relates to a method of increasing the drought resistance of plants, comprising:

introducing a polynucleotide encoding a protein having raffinose synthase activity into plants, wherein said polynucleotide comprises SEQ ID NO:2 or a polynucleotide that hybridizes under stringent conditions to SEQ ID NO:2, wherein the stringent conditions comprise washing at 60°C in 1 X SSC and 0.1% SDS, and

selecting plants which have higher drought resistance compared to the plants prior to introducing the polynucleotide. See Claim 33.

The present invention also includes a method of increasing resistance to high salt concentration in plants,

comprising introducing a polynucleotide encoding a protein having raffinose synthase activity into plants and

selecting plants which have higher resistance to high salt concentration compared to the plants prior to introducing the polynucleotide. See Claim 38.

The present invention also embraces a method of increasing resistance to high salt concentration in plants, comprising:

introducing a polynucleotide encoding a protein having raffinose synthase activity into the plant, wherein said polynucleotide comprises SEQ ID NO:2 or a polynucleotide that hybridizes under stringent conditions to SEQ ID NO:2, wherein the stringent conditions comprise washing at 60°C in 1 X SSC and 0.1% SDS, and

selecting plants which have higher resistance to high salt concentration compared to the plants prior to introducing the polynucleotide. See Claim 43.

The rejection of Claims 8-27 under 35 U.S.C. §102(a) over EP 0 994 186 (hereinafter referred to as "EP '186") is respectfully traversed. EP '186 fails to describe the claimed methods.

EP '186 describes a raffinose synthase gene, a process for producing raffinose, and a transformed plant. See the Abstract. The reference is completely silent with respect to drought resistance or resistance to higher salt concentrations. Therefore, EP '186 fails to describe selecting plants for improved drought resistance or higher resistance to high salt concentrations. Accordingly, the reference fails to disclose or suggest the claimed methods. Withdrawal of this ground of rejection is respectfully traversed.

The rejection of Claims 8-11 and 18-21 under 35 U.S.C. §102(b) over EP 0 849 359 (hereinafter referred to as “EP ‘359”) is respectfully traversed. EP ‘359 fails to describe the claimed methods.

EP ‘359 discloses raffinose synthetase genes which code for proteins capable of producing raffinose. See the Abstract. The reference is completely silent with respect to drought resistance or resistance to higher salt concentrations. Therefore, EP ‘359 fails to describe selecting plants for improved drought resistance or higher resistance to high salt concentrations. Accordingly, the reference fails to disclose or suggest the claimed methods. Withdrawal of this ground of rejection is respectfully traversed.

The rejection of Claims 8-27 under 35 U.S.C. §102(b) over JP 411123080 (hereinafter referred to as “JP ‘080”) is respectfully traversed. JP ‘080 fails to describe the claimed methods.

According to the Abstract, JP ‘080 discloses a gene for raffinose synthetase, production of raffinose, and a transformed plant. There is no indication that the reference describes that the plants have increased drought resistance or resistance to higher salt concentrations. Therefore, JP ‘080 fails to describe selecting plants for improved drought resistance or higher resistance to high salt concentrations. Accordingly, the reference fails to disclose or suggest the claimed methods. Withdrawal of this ground of rejection is respectfully traversed.

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Applicants submit that the present application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

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